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10/725,757

12/02/2003

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463P109

3274

7590

09/22/2004

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EXAMINER

FARAH, AHMED M

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,757

Applicant(s)

MOMIUCHI ET AL.

Examiner

Ahmed M Farah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by over the applicant's admittance of the prior art medical treatment system shown in Fig. 5 of the instant application.

In page 1, line 6 through page 3, line 8, the applicants disclose that the prior art teaches a medical laser system comprising at least a plurality of laser sources, a laser beam multiplexing means for superimposing the laser beams emitted from said laser sources, and a beam mixing means wherein the laser beams from the multiplexing means enter. As shown in Fig. 5, the laser system of the prior art is analogous to the laser system of the instant claims.

3. Claims 1, 2, 4-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ota U.S. Patent No. 6,110,165.

Ota discloses a medical laser system comprising: a plurality of laser sources 1, 2, 7; a laser beam multiplexing means 3, 4, 6, for superimposing the laser beams emitted from the laser sources; a beam condensing means 8; and a beam mixing optical fiber 9 wherein the laser beams from the multiplexing means enter (see Fig. 1). Ota further

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teaches a photodetector 34 for detecting a reflection light of at least one of the laser beams to control emission of said laser beam based on the results of the detection.

4. Claims 1, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Deckelbaum et al. U.S. Patent No. 5,350,375.

Deckelbaum et al disclose a medical laser system comprising: a plurality of laser sources 20, 70; a laser beam multiplexing means 32 for superimposing the laser beams emitted from the laser sources; and a beam mixing means wherein the laser beams from the multiplexing means enter (see Fig. 1). As to claim 5, the beam mixing means comprises a plurality of optical fibers 88, said optical fibers having an integrated output end. As to claim 8, they teach a photodetector 54 for detecting a reflection light of an incident end of the optical fibers to control emission of at least one of the laser beams based on the results of the detection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota in view of the known prior art. Although Ota employs optical fibers to transmit the treatment light, he fails to teach the use of a waveguide to transmit said treatment light. However, the use of a waveguide to transmit optical energy is well known in the optical

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art as well as in the medical art. Therefore, it would have been obvious to one skilled in that art at the time of the applicant's invention to modify Ota and use a waveguide as an equivalent alternative light transmission means.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the following references:

U.S. Patent No. 4,881,808 to Bille et al. discloses a medical laser system comprising: a plurality of light sources 14, 80; a light beam multiplexing means 30, for superimposing the light beams emitted from said light sources; a beam condensing means 32; and a beam mixing optical fiber 9 wherein the laser beams from the multiplexing means enter (see Fig. 1). Ota further teaches a photodetector 34 for detecting a reflection light of at least one of the laser beams to control emission of said laser beam based on the results of the detection.

U.S. Patent No. 5,549,596 to Latina discloses a plurality of laser sources 42, 54; a light beam multiplexing means 48 for superimposing the light beams emitted from said laser sources; a beam condensing means 49; and a beam mixing optical fiber 50 wherein the laser beams from the multiplexing means enter (see Fig. 1).

U.S. Patent No. 6,626,900 to Sinofsky et al. discloses a plurality of light sources 50, 56; a light beam multiplexing optical fibers 34 for superimposing the light beams emitted from said light sources; and reflectance monitor 32 for detecting a reflected light

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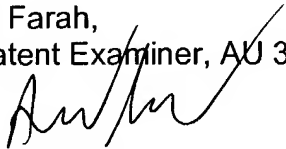
to control emission of at least one of the light sources based on the results of the detection (see Fig. 3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed M Farah whose telephone number is (703) 305-5787. The examiner can normally be reached on Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M DVorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Farah,
Patent Examiner, AU 3739


09/19/2004.